

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2003/002169

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 G11B 7/13

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 G02B 7/04 G11B 7/00 G11B 7/095

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPI, PAJ, "DVD, CD, photo, detector, tracking, focusing, differential, phase"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,493,296 B1(Sony Corp.) 10 Dec. 2002 See abstract, Fig. 3	1-6
Y	US 6,507,009 B1(Hitachi, Ltd.) 14 Jan. 2003 See Fig. 5-7, Fig. 12-13	1-6
A	US 6,064,637 A(Industrial Technology Research Institute) 16 May. 2000 See abstract, Fig. 8a-8b	1
A	US 6,285,635 B1(Matsushia Electric Industrial Co., Ltd.) 4 Sep. 2001 See Fig. 1-2	1
A	US 5,914,925 A(Eastman Kodak Company) 22 Jun. 1999 See Fig. 4	1
A	US 6,292,453 B1(Sony Corp.) 18 Sep. 2001 See Fig. 4	1
A	US 6,424,606 B1(Creative Technology LTD) 23 Jul. 2002 See Fig. 3	1

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:
 "A" document defining the general state of the art which is not considered to be of particular relevance
 "E" earlier application or patent but published on or after the international filing date
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
 "O" document referring to an oral disclosure, use, exhibition or other means
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
 "&" document member of the same patent family

Date of the actual completion of the international search
10 MAY 2004 (10.05.2004)

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11 MAY 2004 (11.05.2004)

Name and mailing address of the ISA/KR

 Korean Intellectual Property Office
 920 Dunsan-dong, Seo-gu, Daejeon 302-701,
 Republic of Korea
 Facsimile No. 82-42-472-7140

Authorized officer
KIM, Sae Young
Telephone No. 82-42-481-5685



INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/KR2003/002169

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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